

1. A method of operating a processor comprising:  
concatenating a first word and a second word to produce an intermediate result;  
shifting the intermediate result by a specified shift amount; and  
storing the shifted intermediate result in a third word.
- 5 2. The method of claim 1 wherein the first word and the second word and the third word are 32-bit words.
3. The method of claim 1 wherein the intermediate result is a 64-bit word.
4. The method of claim 1 wherein shifting comprises right shifting.
5. The method of claim 4 wherein the specified shift amount is in an operand.
- 10 6. The method of claim 4 wherein the specified shift amount is a value between one and thirty-one.
7. The method of claim 4 wherein the specified shift amount is a value contained in a lower five bits of the first word.
8. A computer instruction comprising:  
15 an instruction to concatenate a first word and a second word to produce an intermediate result;  
shift the intermediate result by a specified amount; and  
store the shifted intermediate result in a third word.
9. The instruction of claim 8 wherein the first word and the second word and the  
20 third word are 32-bit words.
10. The instruction of claim 8 wherein the intermediate result is a 64-bit word.
11. The instruction of claim 8 wherein shifting comprises right shifting.
12. The instruction of claim 11 wherein the specified amount is in an operand.

13. The instruction of claim 11 wherein the specified amount is a value between one and thirty-one.
14. The instruction of claim 11 wherein the specified amount is a value contained in a lower five bits of the first word.

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Add  
D1

Add  
E1